

Notice of Allowability

Application No.

10/606,256

Examiner

Sanza L. McClendon

Applicant(s)

LIU ET AL.

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/9/06.
2. ☒ The allowed claim(s) is/are 1-8, 10-12 and 14-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 11/14/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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DETAILED ACTION
Response to Amendment

1. In response to the Amendment received on November 9, 2006, the examiner has carefully considered the amendments.

Response to Arguments

2. Applicant's arguments, see Remarks/Amendment, filed November 9, 2006, with respect to claims 1-8, 10-12, and 14-16 have been fully considered and are persuasive. The rejection of claims 1-8 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as unpatentable over Burgum et al (5,73,767) has been withdrawn. Relying on applicant's arguments and the overall teaching of Burgum et al, the examiner has withdrawn the rejection of claims 1-8 under Burgum et al. Applicant's instant claims recite "a method of *depolymerizing polysaccharides...*" and Burgum et al recites a method of hydrating guar gums, such as xanthan gum, by irradiation. While Burgum et al teaches a method of irradiating polysaccharides (guar gums/xanthan gums), the disclosure of Burgum et al does not expressly teach and/or fairly suggest a method of depolymerizing polysaccharides.

3. The rejection of claims 10-12 and 14-16 under 35 USC 103(a) as being unpatentable over Horton (505,826) in view of Magallanes et al (6,884,884) has been withdrawn. The combination of Horton in view of Magallanes et al does not expressly teach and/or fairly suggest oil well fracturing agents comprising galactomannans having a molecular weight between 100,000 and about 250,000 Daltons and a polydispersity of 2.7 and is at least hydrated within 3 minutes and an additive. Nor is there a disclosure in the combination of Horton and Magallanes et al of an oil well fracturing agent comprising a proppant additive and a galactomannan having a molecular weight between 100,000 and about 250,000 Daltons and a polydispersity of 2.7 and is at least hydrated within 3 minutes. Nor does the combination of Horton and Magallanes et al teach an oil well fracturing agent comprising the above-described additives, a crosslinking agent and a galactomannan having the above-described galactomannan having the above-described properties.

Allowable Subject Matter

4. Claims 1-8, 10-12, and 14-16 are allowed.

5. The following is an examiner's statement of reasons for allowance: see above.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 10, please insert before the word "agent" the word "crosslinking".

Note: This examiner's amendment was authorized by applicant on June 1, 2005 for claim 9 to overcome the "antecedent basis" rejection as discussed. Applicant has cancelled claim 9 and amended claim 10 to include the limitation of claim 9. However applicant failed to include the examiner's amendment inserting the word "crosslinking".


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sanza L. McClendon
Examiner
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SMC